

Inside Wallops

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X-38 Atmospheric Vehicle Completes First Unpiloted Flight Test

Development of the X-38, an innovative new spacecraft design planned for use as a future International Space Station emergency crew return "lifeboat," passed a major milestone March 12 with a successful first unpiloted flight test.

The first X-38 atmospheric test vehicle was dropped from under the wing of NASA's B-52 aircraft at the Dryden Flight Research Center at 11:30 a.m. EST and completed a descent from a 23,000 foot altitude at 11:38 a.m. EST. The test focused on the use of the X-38's parafoil parachute, which deployed as planned within seconds after the vehicle's release from the B-52 and guided the test craft to landing.

"This was a real experimental flight test and the culmination of two years of hard work by a team from the Johnson Space Center and the Dryden Flight Research Center," X-38 project manager John Muratore said. "We had done everything we could to minimize the unknowns. But the real proof of the concept is a successful flight. We got one of those, and we plan to do this about 20 more times over the next two years to prove we're ready to fly from space."

Atmospheric drop tests of the X-38 will continue for the next two years using three increasingly complex test vehicles. The drop tests will increase in altitude to a height of 50,000 feet and include longer flight times for the test craft prior to deployment of the parafoil. In 2000, an unpiloted space test vehicle is planned to be deployed from a Space Shuttle and descend to a landing. The X-38 crew return vehicle is targeted to begin operations aboard the International Space Station in 2003.

Once operational, the X-38 will become the first new human spacecraft designed to return humans from orbit in more than 20 years, and it is being developed at a fraction of the cost of past human space vehicles. The primary application of the new spacecraft would be as an International Space Station "lifeboat," but the project also aims at developing a design that could be easily modified for other uses, such as a possible joint U.S. and international human spacecraft that could be launched on expendable rockets as well as the Space Shuttle. The European Space Agency is cooperating with NASA in the current development work,



The first free flight of the X-38 Crew Return Vehicle

supplying several components for the planned space test vehicle.

The X-38 is being developed with an unprecedented eye toward efficiency, taking advantage of available equipment and already-developed technology for as much as 80 percent of the spacecraft's design. The design uses a lifting body concept originally developed by the Air Force X-24A project in the mid-1970s. Following the jettison of a deorbit engine module, the X-38 would glide from orbit unpowered like the Space Shuttle and then use the steerable parafoil parachute for its final descent to landing.

Landsat-7 Launch Delayed

The Landsat-7 Earth science spacecraft will not be launched in July 1998 as planned, due to necessary changes in the design of the electrical power supply hardware for the spacecraft's main instrument.

A new target launch date will be set by NASA officials after completion of instrument thermal vacuum tests scheduled for this July.

During a series of instrument-level thermal vacuum tests beginning in December 1997, a power supply on the Enhanced Thematic Mapper Plus (ETM+) instrument failed twice. ETM+ is Landsat-7's only science instrument.

As a result of the most recent failure in January, both internally redundant power supplies were returned to their manufacturer. Completion of vacuum testing will be delayed while the power supplies are being repaired, which will consequently delay the launch.

Wallops Shorts......

The seventh in a series of eleven sounding rockets in the Coqui Dos Campaign was successfully launched from Tortuguero, Puerto Rico at 7:39 p.m. on March 11. The Terrier-Black Brant carried a payload to study linear and non-linear interactions of electromagnetic waves with a plasma, including both parametric instabilities and collapse of intense fields into cavitons. Dr. Mike Kelley, Cornell University was the principal investigator and Prasad Hanagud, Code 546, was the Wallops payload manager.

Judge

Angela Wyatt, Computer Sciences Corporation, served as a judge for the Eastern Shore Computer Bowl held on March 13 at Salisbury State University. During the Computer Bowl, high school students from lower Delaware and the Eastern Shore of Virginia and Maryland participate in computer programming competition.

Fire and Emergency Medical Assistance

The Wallops Fire Department responded to a call for assistance, March 10, to battle a blaze that destroyed the Temperanceville Flea Market. A total of 11 local fire departments responded with 25 units. Wallops firefighters from the Main Base and Wallops Island set up a water resupply point at the Island gate and supplied firefighting units with between 35,000 and 40,000 gallons of water. Additional support from Wallops included a 7,000 gallon capacity water tanker and two firefighters.

Wallops Fire Department Emergency Medical Technicians responded to a call for medical assistance in Building F-5 on March 12. The patient was transported to Peninsula Regional Medical Center, Salisbury, MD.

Pathfinder Dead

After more than five fruitless months, NASA scientists declared the Pathfinder spacecraft officially dead. Pathfinder's rover and lander touched down on Mars in July and sent information back to Earth until Sept. 27. A signal was last heard Oct. 6.

Monthly Morning Coffee

Wallops employees, civil service and contractor, are invited to attend an informal morning coffee with Wallops managers from 8 to 9 a.m., March 18, in the cafeteria.



Congressional Resolution Designating the Month of March

"Women's History Month"

Whereas American women of every race, class and ethnic background have made historic contributions to the growth and strength of our Nation in countless recorded and unrecorded ways;

Whereas American women have played and continue to play a critical economic, cultural, and social role in every sphere of the life of the Nation by constituting a significant portion of the labor force working inside and outside of the home;

Whereas American women have played a unique role throughout the history of the Nation by providing the majority of the volunteer labor force of the Nation;

Whereas American women were particularly important in the establishment of early charitable, philanthropic, and cultural institutions in our Nation;

Whereas American women of every race, class, and ethnic background served as early leaders in the forefront of every major progressive social change movement;

Whereas American women have been leaders, not only in securing their own rights of suffrage and equal opportunity, but also in the abolitionist movement, the emancipation movement, the industrial labor movement, the civil rights movement, and other movements, especially the peace movement, which create a more fair and just society for all; and

Whereas despite these contributions, the role of American women is history has been consistently overlooked and undervalued, in the literature, teaching and study of American History;

Now, therefore, be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, that March is designated as "Women's History Month." The President is authorized and requested to issue a proclamation for each of these months, calling upon the people of the United States to observe those months with appropriate programs, ceremonies and activities.

Information on the Wallops Federal Women's Program can be found at the following address: http://www.wff.nasa.gov~web/FWP

For Sale

Vacation for two. Five days — Orlando and Ft. Lauderdale, FL. Three days — Bahamas. Low cost. Two bonus trips available. For info call (757) 665-4988.

St. Patrick's Day March 17



International Space Day

Astronaut Andy Thomas, aboard the Russian Space Station, Mir, recently announced Space Day 1998 will take place May 21. Thomas noted that the goal of Space Day is to advance science, math and technology education and inspire future generations to realize the vision of our space pioneers.

A series of educational programs will highlight Space Day. These will include:

Cyber Space Day - An intergalactic Teach-In broadcast on the web aimed at providing students of all ages with the chance to meet some space pioneers.

Outside the Envelope: Exploring Beyond Earth's Boundaries - The Challenger Center for Space Science Education takes 4th through 8th grade students on an electronic field trip to show students how space missions unveil the mysteries of our universe.

Students Signatures in Space - Elementary school students around the world will have the opportunity to send their signatures on a Space Shuttle mission.

Cosmic EdVentures: Exploring Earth's Neighborhood - Introduces children in grades 3 through 6 to the wonders of our solar system.

For more information, visit the official web site for Space Day at: www.spaceday.com

ISO 9000 Employee Awareness Briefings Rescheduled

The ISO 9000 sessions originally scheduled for March 10 and 11 have been rescheduled as follows. All sessions will be in the Building F-3 Conference Area.

Date	Time	Last Name
3/31/98	9-11 a.m.	A - H
3/31/98 4/01/98	1-3 p.m. 9-11 a.m.	I - R S - Z

Employees who are unable to attend their designated session are encouraged to pick one of the other two times to go. For further information email David Cleveland, GSFC at the following address: dclevela@pop300.gsfc.nasa.gov

Retirement Planning Workshops

Thinking about your future? Consider attending a retirement planning class. These classes help participants understand what their choices are and how to achieve their goals. Participants hear the latest details and options from topic experts.

Retirement Planning at Any Age is a two-day class that will be offered at Wallops on May 18 & 19. This 16-hour class is meant for civil servants in the FERS program and covers such topics as retirement system benefits, Social Security, Thrift Savings Plan (TSP), insurance needs, benefits and options to include FEGLI and FEHBP, financial planning, estate planning, and legal aspects. This class focuses on long- and short-term planning.

Retirement Planning Workshop is a three-day class that will be offered at Wallops on April 6, 7, and 8. This 24hour class is intended for civil servants under any retirement system that are considering retiring within the next five years. This workshop assists participants in deciding when or whether to retire. Workshop topics include mid-life role changes and transitions, retirement system benefits, life and health insurance, Social Security and Medicare, financial planning, legal and estate planning, financial planning for longterm care and planning a healthy retirement.

Both classes are Center-funded. Training requests from Code 800 should be routed through Sherry Kleckner, x1204. All training requests must reach Laura Potler, Code 114, no later than three weeks prior to training.

Thanks.....

There were 41 donors for the American Red Cross, Bloodmobile, Blood Drive. Thanks to those who once again donated blood and gave of their time.

Dianne Hargrove, R.N. Wallops Health Unit

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